

Nutrition for Children with CF

Normal growth and development are the main nutritional goals for children with CF. Better nutritional status in childhood is associated with improved lung function, immunity to help fight infections, mood and wellbeing, weight stability, adult height and fewer complications associated with CF.

The team at Perth Children's Hospital will closely monitor your child's weight and growth at clinic visits and the dietitian will provide tools and strategies aimed at keeping your child at an optimal nutritional status.

The CF diet

A well-rounded diet including a variety of foods from all food groups is recommended for all children with CF.

Historically, children with CF required a high fat diet. With recent advancements in treatment options, this is no longer the standard recommendation for all children. Each child's requirements are different depending on their age, gender, physical activity, disease state, lung function, medications and medical history.

Children with increased needs, such as those who are experiencing poor growth or recurrent illnesses, may be encouraged to follow a higher energy diet. However, this is individualised and should be discussed with and monitored by your child's dietitian.

Enzymes

If your child is pancreatic sufficient, their body is able to produce and release enough digestive enzymes to breakdown and digest food and they won't need medication to assist with digestion.



However, around 90% of children with CF are pancreatic insufficient. This means the pancreas is unable to produce or release enough digestive enzymes to help with digestion.

They will need to take Pancreatic Enzyme Replacement Therapy (PERT) with most foods to help them absorb the energy and nutrients contained in the food. Enzyme dosage will be decided by your child's CF dietitian and depends on their age, weight, level of pancreatic function, types/amounts of food they eat and signs and symptoms of malabsorption.

Malabsorption

If enzymes are forgotten, your child may experience some tummy pain and/or diarrhea, but this will ease. If enzymes are not given regularly, over time their growth, weight, macro and micro-nutrient absorption will be impacted.

Bowel movement, appearance, consistency, frequency and comfort can indicate how well your child is digesting and absorbing their food. If your child is experiencing tummy pain, excessive wind and discomfort, very bad smelling bowel movement, greasy, oily bowel movements, diarrhoea, constipation, poor weight gain and/or growth they should be reviewed by their dietitian.

Vitamins

Children with CF often have deficiencies in fat-soluble vitamins A, D, E and K, and will therefore require vitamin supplementation. VitABDECK is a CF-specific multivitamin that is commonly prescribed. Vitamin levels should be checked annually, or more frequently as determined by your CF care team.

Salt

Children with CF lose large amounts of sodium (salt) in their sweat, which needs to be replaced through diet and supplements. Not getting enough salt can interfere with growth, reduce appetite, and cause stomach pain and dehydration. It is important to take into account environmental factors such as heat and humidity as salt losses are even higher in hot weather. If children are more active or sick with a fever, they may also have increased sweating and therefore salt losses.

Signs your child may need more salt include muscle cramps, poor growth and fatigue. If your child experiences nausea or vomiting when taking salt, discuss this with your CF team. Each child will have individual salt requirements based on factors including depletion symptoms, weight, and climate.

Nutrition when unwell

When a child is unwell, they often lose their appetite. This is common for all children, however for children with CF can cause extra worry for parents. It is important to offer your child foods and drinks they can tolerate during this period. If your child is frequently unwell, your dietitian will assess and provide individual recommendations for your child's needs.

It is also important to be aware of dehydration during illness. Fluid and salt supplementation are very important during this time. Small, frequent offering of any fluid including chocolate milk or juice can help your child meet their hydration needs.

Useful resources

- [Nutrition for Children](#) (CFWA)